

Claims

1. An identification label for surface mounting or for mounting around an object, provided with a multi-layered layer structure with an identification layer for optical marking, a reinforcement layer for mechanical stabilization of the identification layer, and an adhesion layer for mounting the identification label to the object, characterized in that the reinforcement layer (12, 46) serves as the substrate for arranging a transponder unit (16, 41).

2. An identification label according to claim 1, characterized in that the transponder unit (16, 41) extends in a boundary layer (21) formed between the reinforcement layer (12, 46) and the adhesion layer (13).

3. An identification label according to claim 1 or 2, characterized in that the adhesion layer (13) is covered by a deadening layer (15) and the reinforcement layer (12, 46) is provided with a mounting device for mounting the identification label to the object.

4. A base unit for producing an identification label for surface mounting or mounting around an object, including a reinforcement layer and an adhesion layer, characterized in that the reinforcement layer (12, 46) serves as a substrate for arranging a transponder unit (16, 41) in a boundary layer (21) formed between the reinforcement layer (12, 46) and the adhesion layer (13).

5. A base unit according to claim 4, characterized in that the reinforcement layer (12, 46) is provided with a window opening (23, 43, 48) for at least proportionally accepting a chip unit (17) and the chip unit contacting an antenna coil (18, 42) made of wire (28) for forming the transponder unit (16, 41).

6. A base unit according to claim 5, characterized in that the reinforcement layer (12) is provided with additional window openings (49, 50) for accessing the contact regions (51, 52) of the chip unit (17).

7. A base unit according to claim 5 or 6, characterized in that the chip unit (17) is at least partially surrounded by a reinforcement device (44) surrounding the chip unit and extending in the level of the reinforcement layer (12, 46).

8. A base unit according to one or more of the claims 5 through 7, characterized in that the antenna coil (41) is positioned on the reinforcement layer (12) and is covered by the adhesion layer (13), forming a plane adhesion surface (14).

9. A base unit according to one or more of the claims 5 through 7, characterized in that the antenna coil (18) is at least proportionally embedded in the reinforcement layer (12, 46) and is covered by the adhesion layer (13, 47), forming a plane adhesion surface (14).

10. A base unit according to one or more of the claims 4 through 9, characterized in that the adhesion surface (14) of the adhesion layer (13, 47) is covered by a deadening layer (15).

11. A base unit according to claim 10, characterized in that the deadening layer is embodied by the clear surface of the reinforcement layer (12, 46) of an additional base unit (19).

12. A process for producing an identification label according to one or more of the claims 1 through 3, characterized in that a base unit (19) according to one or more of the claims 4 through 11 is provided and an identification layer (11) is applied onto the base unit (19).

13. A process according to claim 12, characterized in that a carrier layer (37) is applied onto the base unit (19, 45) prior to applying the identification layer (11) for forming an intermediate layer.

14. A process according to claim 12 or 13, characterized in that a permanent adhesion layer (33) is applied onto the base unit (19), the identification layer (11), or the carrier layer (37) in order to be mounted between the base unit (19) and the identification layer (11) or the carrier layer (37).

15. A process according to claim 12 or 13, characterized in that an additional adhesion layer

(47) is applied onto the base unit (45), the identification layer (11), or the carrier layer (37) in order to be mounted between the base unit (45) and the identification layer (11) or the carrier layer (37).

16. A process according to one or more of the claims 12 through 15, characterized in that the coding of the identification layer (11) and the coding of the transponder unit (16, 41) occur in a common coding process.